

## CLIMATE RESEARCH ELIMINATION

**BACKGROUND:** Per the President’s FY 2019 budget, the Agency is eliminating climate change research within its Research and Development Program. EPA’s Research and Development Program will continue to support clean air and energy research, and will be prioritizing limited resources to focus on these issues.

### KEY POINTS:

- States, local governments, and communities actively request information and tools to prepare for the impacts of climate change. Researchers in the Air and Energy (A&E) research program answered the public need by developing user-friendly tools for communities.
- This research focused on adaptation and community resiliency.
  - *Assessing impacts* – assess human and ecosystem exposures and effects associated with air pollutants and climate change.
  - *Preventing and reducing emissions* – provide data and innovative tools to prevent and reduce air pollution emissions in environmentally sustainable and cost-effective ways.
  - *Responding to changes in climate and air quality* – provide modeling, monitoring, metrics, and information needed to prepare for climate change and make public health decisions regarding air quality.

### TALKING POINTS:

- The President’s FY19 budget eliminates climate change research.
- EPA’s climate research focused on adaptation and community resiliency.
- Going forward EPA’s Air & Energy research program will continue to support clean air and energy research.

### TALKING POINTS RE CLIMATE WEBSITE:

- We are constantly updating our website to reflect new initiatives and projects of the Agency.
- Of course, the website will be reflective of the current administration’s priorities.
- With that said, all the content from the previous administration is still easily accessible and publicly available. It’s right at the top of the main page of the site.

## RESOURCES (Dollars in Millions):

Approp.	FY 2017 Enacted		FY 2018 Enacted		FY 2019 Pres Bud		Delta FY 2018ENA v. FY 2019 Pres Bud	
	\$	FTE	\$	FTE	\$	FTE	\$	FTE
S&T	\$18.9M	48.5	\$19.0M	47.3	\$0.0M	0.0	-\$19.0M	-47.3
<b>Total</b>	<b>\$18.9M</b>	<b>48.5</b>	<b>\$19.0M</b>	<b>47.3</b>	<b>\$0.0M</b>	<b>0.0</b>	<b>-\$19.0M</b>	<b>-47.3</b>

## **EPA'S INTEGRATED RISK INFORMATION SYSTEM (IRIS)**

### **BACKGROUND:**

IRIS was created in 1985 to provide high quality, publicly available information on the toxicity of chemicals to which the public might be exposed. The goal of IRIS is to foster consistency in the evaluation of chemical toxicity across the Agency.

### **KEY POINTS:**

- House Science members recently proposed a bill to move the functions of IRIS, which supports the ORD Human Health Risk Assessment Research Program, into the EPA program offices.
- Over the past 1.5 years, ORD has been responding to NAS and GAO comments and recommendations about the IRIS program. These actions were presented to the NAS this past winter. NAS concluded that EPA made substantial progress. GAO has noted significant improvement in their high-risk criteria ratings.
- EPA's FY 2019 budget request supports IRIS with \$11.9M and 47.0 FTE. This is a reduction of \$10.0M and 36.7 FTE from FY 2018 Enacted levels.

### **TALKING POINTS:**

- I recognize the importance of conducting assessments on sound science – and of conducting them in a timely and transparent manner.
- That's why I'm happy with the improvements in the IRIS program, and it's on a good track for future assessments.
- Since January 2017, IRIS has introduced a number of changes to improve the program.
- Some of these are in response to comments by the National Academy of Science and the GAO. Both NAS and GAO have commended IRIS for these changes.
- For example, IRIS increased transparency by engaging with stakeholders earlier in assessment development, and by fully implementing the principles of systematic review, which creates a clearer evaluation of the underlying science.
- We are also instituting a process where EPA programs and regions will request specific assessments - outlining exactly what they need and why, plus a timeline.
- This is because IRIS assessments are expensive and take a lot of time to do. So, we need to know exactly why the assessment is needed, who the end-user is, and when they need the assessment by. This will ensure greater accountability from both ORD and program and regional offices.
- These changes will bring further stability, confidence, and accountability to the IRIS program in the long term.

## **FORMALDEHYDE IRIS ASSESSMENT**

**BACKGROUND:** EPA is conducting an IRIS assessment on formaldehyde. There has been congressional interest in the assessment's status.

### **TALKING POINTS OPTION 1:**

- The IRIS assessment of formaldehyde will soon be ready to proceed to Agency review.
- After this, it will undergo the 7-step process negotiated with OMB that all IRIS assessments must go through.
- This process includes engagement across the Agency, the federal government, with the public, and through independent, scientific peer review.
- Both the NAS and SAB will be reviewing the formaldehyde assessment.

### **TALKING POINTS OPTION 2:**

- ORD is currently developing a new approach of soliciting program and regional office input on current and future IRIS assessments, to ensure IRIS assessment activities are focused on the highest priority needs of the Agency.
- The formaldehyde assessment will be included in this activity, and inform our next steps.

## ORD SUPPORTS TSCA

### BACKGROUND:

In June 2016, Congress passed the Frank R. Lautenberg Chemical Safety for the 21<sup>st</sup> Century Act. The Lautenberg Act amends TSCA, which is the Nation's primary chemical management law. The new law, which received bipartisan Congressional support, includes much needed improvements to protect American families from the potential health effects of chemicals, including: mandatory requirements for EPA to evaluate existing chemicals with clear and enforceable deadlines, risk-based chemical assessments, increased public transparency for chemical information, and a consistent source of funding for EPA to carry out the responsibilities of the new law. EPA's research is providing critical chemical data, information, tools, and approaches to support the agency's implementation of the amended TSCA.

### KEY POINTS:

- TSCA section 6 describes a new approach for evaluating the safety of existing chemicals, which includes chemical prioritization, risk evaluation, and risk management. EPA researchers are developing innovative ways to prioritize chemical substances and complete timely risk evaluations, including:
  - Creating tools to generate, compile and manage data associated with approximately 40,000 chemical substances on the TSCA Active Inventory;
  - Developing approaches for prioritizing chemicals and completing detailed chemical evaluations of existing chemicals; and
  - Providing technical support and expertise for chemical-specific risk evaluations.
- EPA researchers have responded to requests from Congress regarding the Lautenberg Act. Rising to the challenge of reducing the use of vertebrate animals in chemical testing, EPA scientists developed a Strategic Plan for promoting the development of new approach methodologies (TSCA section 4) and strategies to reduce, refine or replace vertebrate animal testing. The Strategic Plan was released on June 22, 2018 (the second anniversary of the signing of the Lautenberg Act), and is now being implemented to develop, test, and adopt chemical testing approaches that broaden understanding of chemical impacts on biological systems, expedite testing, decrease overall testing costs, and provide support for risk evaluations

### TALKING POINTS:

- EPA's research is providing critical chemical data, information, tools, and approaches to support the agency's implementation of the amended TSCA.
- Our scientists developed a Strategic Plan that will help reduce animal testing.
- They have also provided the tools for EPA regulators to meet each of the deadlines outlined in the Lautenberg Act.
- EPA science is leading the world in the development of new approaches for improving and expediting chemical testing and evaluation, saving money for industry, and protecting consumers.

## HARMFUL ALGAL BLOOMS (HABS) RESEARCH

**BACKGROUND:** HABs are overgrowths of toxin-producing algae (including cyanobacteria) in fresh or marine waters that can cause a variety of negative ecological, economic, and health impacts. Excessive concentrations of nutrients exacerbate the frequency and severity of blooms. The frequency, intensity, and duration of HABs can negatively impact drinking and recreational waters.

### KEY POINTS:

- EPA research is focused on providing decision makers, including states, municipalities, water treatment facilities, and tribes, with improved scientific information and tools to more effectively identify and predict HABs events, and to manage the health and ecological risks associated with them.
- Research also focuses on developing methods to predict and characterize blooms with innovative technology.
- An example of a recent accomplishment is the *Cyanobacteria Assessment Network (CyAN) mobile application*.
  - The CyAN app is the first platform for immediate HABs decision support for U.S. freshwater systems.
  - CyAN is operational and providing weekly data to collaborators. It is currently available to any state regulatory agency or health department for beta testing.
- EPA develops drinking water methods for use in monitoring hazardous algal blooms. EPA was a key player in the Toledo, OH drinking water crisis a few years ago.

### TALKING POINTS:

- Harmful algal blooms, or HABs, can impact American's drinking water and recreational water, such as lakes, rivers, and beaches.
- This can negatively affect the ecosystem, the local economy, and, most importantly, our citizens' health.
- That's why EPA researchers are working closely with states and communities, including water treatment facilities and tribes, to provide the tools and scientific information they need to identify and predict HABs events, and to manage the health and ecological risks associated with them.
- Our research also focuses on developing methods to predict and characterize blooms with innovative technology.
- For example, we recently developed an app, called CyAN, that provides weekly data that our federal, state, and local partners can use to monitor their efforts to assess water quality.
- If a community is affected by a harmful bloom, EPA researchers can work directly with the community to manage potentially negative effects, such as helping treat drinking water.

## **ANIMAL TESTING AT EPA**

**BACKGROUND:** EPA has taken many steps to drastically reduce animal testing. However, currently there are no good cellular or computational models that can accurately represent all the effects of pollutants on all organs. Studies on the health effects of pollutants using animals are critical to provide biological plausibility to observations of human health impacts of pollutants. These studies are needed to achieve EPA's core mission of protecting human health.

### **KEY POINTS:**

- In June, the Agency released a "Strategic Plan to Promote the Development and Implementation of Alternative Test Methods Within the TSCA Program." EPA is working hard on developing these alternative testing methods.
- As a federal research institution, EPA adheres to the US Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training. EPA is accredited by the Association for Assessment and Accreditation of Laboratory Animal Care International and assured by the Public Health Service. All of EPA's animal studies are carefully reviewed to ensure they meet the highest standards of the Institutional Animal Care and Use Committee.
- A recent article in the Daily Caller highlighted a letter sent to EPA by six members (3 Republican, 3 Democrat) about the money spent on animal testing in Research Triangle Park.

### **TALKING POINTS:**

- Animal testing is a wide-spread practice used by industry, academia and government scientists.
- Prior to and consistent with direction in the Lautenberg legislation, EPA has taken many steps to drastically reduce animal testing.
- However, animal testing is still needed to help us protect human health.
- This is because there are currently no adequate cellular or computational models that can accurately represent all the effects of pollutants on all organs.
- When we do have to use animal studies, EPA follows the highest possible ethical standards.
- We adhere to the US Government Principles for the Utilization and Care of Vertebrate Animals Used in Testing, Research, and Training.
- EPA is also accredited by the Association for Assessment and Accreditation of Laboratory Animal Care International.
- EPA has certified animal care facilities, and all animal testing protocols are reviewed and approved by an Institutional Animal Care and Use Committee.

## **PROPOSED RULE TO STRENGTHENING TRANSPARENCY IN REGULATORY SCIENCE**

**BACKGROUND:** On April 30, 2018, EPA announced a proposed rule to strengthen transparency in regulatory science. The comment period on the proposed rule is currently open and will close on August 16, 2018.

### **KEY POINTS:**

- This action seeks to ensure that the regulatory science underlying EPA's actions is publicly available in a manner sufficient for independent validation. Where available and appropriate, EPA will use peer-reviewed information, standardized test methods, consistent data evaluation procedures, and good laboratory practices to ensure transparent, understandable, and reproducible scientific assessments.
- The public comment period originally closed on May 30, but after requests from the public and from House and Senate Democrats (including Sens. Carper and Whitehouse), the comment period was extended to August 16, and EPA decided to hold a public hearing.
- On July 17, EPA held a public hearing on the proposed rule. Congress Members Tonko, Bonamici, and Lipinski testified.

### **TALKING POINTS:**

- I am here to protect two competing interests - access to science and data, while at the same time protecting confidential and personal information.
- These two interests are not mutually exclusive. I am committed to ensuring both and by doing so will strengthen the confidence in the work that EPA produces.
- The proposed rule to Strengthen Transparency in Regulatory Science seeks to ensure that the regulatory science underlying EPA's actions is publicly available in a manner sufficient for independent validation.
- The comment period for the proposed rule is open until August 16, 2018. We encourage people to submit their comments at [regulations.gov](https://www.regulations.gov).
- We also recently held a public hearing to get feedback on the proposed rule.
- As of July 25, 2018, EPA has received over 217,000 public comments.
- EPA will address all public comments before moving forward with the final rule. An Action Development Workgroup will handle this process.
- In implementing this rule, we will ensure that all private data is protected.
- EPA supports increasing access to scientific information and has made strides in making its federally-funded data available to the public. You can see EPA's plan to do this at [epa.gov/open](https://www.epa.gov/open).

## SCIENCE BOARDS

**BACKGROUND:** EPA has 22 advisory committees that fall under the Federal Advisory Committee Act (FACA). These committees provide advice to the agency on issues that range from science and economics to air quality. Earlier this year, Former Administrator Pruitt appointed new leadership and several new members to three important and independent advisory committees: the Clean Air Scientific Advisory Committee (CASAC), the Science Advisory Board (SAB), and the Board of Scientific Counselors (BOSC – this happened in 2017). The Former Administrator also issued a new directive to ensure that any advisors serving on an EPA Federal Advisory Committee (FAC) are independent and free from any real, apparent, or potential interference with their ability to fairly and objectively serve as a committee member.

### TALKING POINTS:

- These committees help ensure that we are doing our best as an Agency by giving independent scientific advice to inform sound decision-making.
- Each year the Agency has the opportunity to appoint new members to these committees. In a fair and transparent fashion, EPA reviews the qualifications of hundreds of new individuals nominated for these committees.
- Currently there are 36 nominations for membership to the Clean Air Scientific Advisory Committee (CASAC). The Agency expects to have final decisions on who will be serving on the CASAC by October 1, 2018.
- The Science Advisory Board (SAB) is currently in the process of soliciting membership for the Board and four of its Standing Committees. Decisions are expected in the Fall of 2018.
- Last year, EPA appointed 43 new members to the Board of Scientific Counselors.
- Opening the competitive nomination process to ensure fair consideration of nominees has resulted in appointments that increase diversity of scientific views and increase membership from different geographic areas, states, tribes, and other sectors.
- Members include those from the entire environmental stakeholder community – NGOs, academia, industry, and state, tribal and local officials. The makeup of the membership speaks to my commitment to science and willingness to listen to thoughtful expertise from all perspectives.
- Consistent with the directive on strengthening and improving membership on EPA's federal advisory committees, moving forward, non-governmental and non-tribal members will be independent from EPA, meaning that members of EPA's federal advisory committees should not be currently in receipt of EPA grants, or in a position that otherwise would reap substantial direct benefit from an EPA grant.
- As is stated in the directive, I reserve my right to exercise my discretion to look at appointments on a case by case basis.
- I look forward to working with these impressive committee members, who will bring their expertise and varied perspectives as they work and advise the Agency on complex science issues that EPA and our state, tribal, local and community partners face every day.



## VIEQUES, PUERTO RICO

**BACKGROUND:** The former Vieques Naval installation is a 23,000-acre facility located on Vieques Island, Puerto Rico. From the mid-1940s until 2003, significant amounts of munitions items were fired during military training. In 2005, large portions of Vieques and the surrounding waters were placed on the National Priorities List (NPL). The site has unique challenges such as unexploded ordnance across thousands of acres of land and sea floor, abundant ecologically and culturally sensitive resources, and the sometimes-differing viewpoints and objectives of numerous stakeholders.

### KEY POINTS:

- Senator Wicker recently spoke with former Administrator Pruitt about the issue in Vieques, and if EPA could give a grant to Mississippi State University to assist.
- EPA does not have block-grant authority, and ORD's grant authority does not allow for non-competitive research grants as described in the request from the Mayor of Vieques.
- ORD supports the goal and has been working with OCFO on funding and to determine the best legally-available avenue for assisting Vieques and coordinating with Mississippi State University.
- The best approach appears to be providing technical assistance via an EPA support contract. ORD is working to gather additional information and identify a contract that could be used for this effort. However, given contracting requirements, it is highly unlikely the work under the contract could be sole-sourced to Mississippi State University.

### TALKING POINTS:

- Providing assistance to Vieques is a priority for EPA.
- Our research grant authority does not allow for non-competitive research grants, as requested for Mississippi State University.
- However, we are currently exploring options to determine the best legally-available avenue for assisting Vieques and coordinating with Mississippi State University.
- This could be a competitive research grant, but we are still working on figuring out the best way to help.
- We hope to have this assistance mechanism in place as soon as possible.

## TITLE 42

**BACKGROUND:** The Title 42 authority provides EPA with an important tool to make the critical workforce investments needed to accomplish its mission to protect human health and the environment. It allows EPA's Office of Research and Development (ORD) to nimbly respond to changing priorities and organizational needs of EPA programs and regions, as well as its state partners.

### KEY POINTS:

- Representative Burgess recently sent EPA a letter criticizing EPA's use of Title 42.

### TALKING POINTS:

- The Title 42 authority allows EPA to make the critical workforce investments needed to accomplish its mission to protect human health and the environment.
- It allows EPA's Office of Research and Development (ORD) to nimbly respond to changing priorities and organizational needs of EPA programs and regions, as well as its state partners.
- These needs include areas such as TSCA reform and lead and water infrastructure.
- Without Title 42, ORD would have trouble competing for pre-eminent talent, would likely lose essential scientific experts to other organizations, and would lose the flexibility in the workforce needed to quickly address the nation's most pressing environmental concerns.
- EPA's use of the Title 42 authority allows flexibility in EPA's scientific workforce to address the nation's various pressing environmental problems.
- It also increases EPA's ability to provide state, tribal, and local partners with the high quality scientific tools and information needed to protect air, land, and water.

## **TIRE CRUMB**

**BACKGROUND:** On February 12, 2016, the U.S. Environmental Protection Agency (EPA), the Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry (ATSDR), and the Consumer Product Safety Commission (CPSC) launched a multi-agency Federal Research Action Plan on Recycled Tire Crumb Used on Playing Fields and Playgrounds to study key environmental and human health questions.

### **KEY POINTS:**

- Staffers from House, particularly HEC, regularly ask for updated on the report.

### **TALKING POINTS:**

- Concerns have been raised by the public about the safety of recycled rubber tire crumb used in synthetic turf fields and playgrounds in the United States.
- We know people are concerned and players and their families want answers.
- Limited studies have not shown an elevated health risk from playing on fields with tire crumb, but the existing studies do not comprehensively evaluate the concerns about health risks from exposure to tire crumb.
- We are committed to supporting more comprehensive efforts to assess risks from tire crumb, and are working with the Centers for Disease Control and the Consumer Product Safety Commission.
- We are currently working on a report that fills important data and knowledge gaps, characterizes constituents of recycled tire crumb, and identifies ways in which people may be exposed to tire crumb based on their activities on fields.
- The report will provide a better understanding of potential exposures that athletes and others may experience and will help answer some of the key questions that have been raised.
- While this effort won't provide all the answers about whether synthetic turf fields are safe, it represents the first time that such a large study is being conducted across the U.S.
- The draft report was sent for external peer review in May 2018. EPA and CDC continue to work together on this report. We have received peer review comments and are currently reviewing them. We expect to release the report for public comment in late summer/early fall.

## **ADDITIONAL INFORMATION**

### **EPA RESEARCH SUPPORT FOR STATES**

**BACKGROUND:** ORD provides vital scientific and technical resources to states and their communities, including technical support and training, science-based tools, and innovative approaches and methods, which helps them meet environmental and public health challenges.

#### **KEY POINTS:**

- Examples of ORD work to support states include: algal toxin management support (Ohio); technical assistance in chemical facility (LaPlace, LA) and water distribution (Corpus Christi, TX) matters, and technical and data support in making PFAS management decisions for drinking water issues in multiple regions and states (NC, NH, NJ, WV, etc.)
- Example activities to strengthen ORD's partnership with states include:
  - Providing regular calls and monthly public webinars on topics of interest to states, including bimonthly calls with ECOS/states to share information on PFAS toxicity, methods and treatment work. This will make EPA research and applied science tools more accessible to states.
  - Inviting state environmental agency leaders and staff to ORD laboratories to discuss topics of interest and connect them with EPA research and expertise, and for ORD to learn more about environmental challenges states are confronting in the field. Recent meetings include: Region 4 Southeastern and neighboring states' visit to EPA RTP (August 2017); R5 Midwest and neighboring states' visit to EPA Cincinnati (February 2018); and R1 New England states' visit to ORD's Narragansett, RI lab (June 2018).
  - Increasing interactions with state media associations, including air (AAPCA and NACAA), water (ACWA and ASDWA) and waste (ASTSWMO) to ensure EPA research addresses state needs.
- ORD collaborates with the Interstate Technology & Regulatory Council on stormwater, per- and poly-fluorinated alkyl substances (PFAS) and remediation technical issues.
- ORD sponsors the Regional Applied Research Effort (RARE) program to respond to the high priority applied research needs of EPA regions, state and local governments, and tribes.

#### **TALKING POINTS:**

- ORD has a strong partnership with the states and works closely with state associations like ECOS and ASTHO.
- ORD provides important science and technical information to states to help meet their immediate and long-term needs so that they can protect their health and environment.
- EPA ORD has developed critical partnerships with state environmental and health agencies to ensure its work is relevant to real-world environmental challenges, and that ORD's scientific findings and tools are delivered and translated to decision makers.
- ORD has partnered with the Environmental Council of the States (ECOS) to ensure EPA research is useful and practical for states to help address their on-the-ground problems.

## ADDITIONAL INFORMATION

### SCIENCE TO ACHIEVE RESULTS (STAR) GRANTS PROGRAM ELIMINATION

**BACKGROUND:** Beginning in 1995, the STAR program has funded research grants in numerous environmental science and engineering disciplines through a competitive solicitation process and independent peer review. More than 100 institutions utilized this program in recent years.

**KEY POINTS:**

- Per the FY 2019 President's Budget, EPA is eliminating the STAR grants program. EPA's Research and Development Program is focused on EPA's core mission of supporting human health and environment.
- Two House members (Ellison and Grijalva) recently sent a letter criticizing plans to eliminate the STAR program.
- STAR grants were offered through 4 of EPA's national research programs:
  - Sustainable and Healthy Communities Program - Provided funding for the NIEHS/EPA Children's Centers, advanced knowledge of how children's health is impacted by the environment, genetics and other factors.
  - Chemical Safety and Sustainability Program - Advanced scientific understanding of the impacts of manufactured chemicals on ecosystem health.
  - Air and Energy (A&E) Program - Provided funding for A&E centers to inform state and local policy makers regarding effective air pollution control strategies to reduce air pollution exposure.
  - Safe and Sustainable Water Resources Program - Provided funding for Green Infrastructure research which identified solutions for stormwater runoff prevention and contamination of local waterways.

**TALKING POINTS:**

- STAR is EPA's primary competitive, peer-reviewed, extramural grants program.
- Since its inception, the program has awarded more than 7,600 research grants throughout the nation.
- STAR stimulates and supports scientific and engineering research that advances the agency's mission to protect human health and the environment. It also provides access to the nation's best scientists and engineers in academic and other nonprofit research institutions.

**RESOURCES**  
(Dollars in Millions):

Approp.	FY 2017 Enacted	FY 2018 Enacted	FY 2019 Pres Bud	Delta FY 2018 ENA v. FY 2019 Pres Bud
S&T	\$28.4M	\$28.5M	\$0.0M	-\$28.4M
<b>Total</b>	<b>\$28.4M</b>	<b>\$28.5M</b>	<b>\$0.0M</b>	<b>-\$28.4M</b>

**ADDITIONAL INFORMATION**  
**HOMELAND SECURITY RESEARCH PROGRAM**

**BACKGROUND:** EPA's Homeland Security Research Program provides critical science to fulfill statutory emergency response and bioterrorism responsibilities, and supports EPA's efforts to help communities prepare for and respond to disasters.

**KEY POINTS:**

- The Homeland Security Research Program sustained reductions in FY 19 in the following areas:
  - o Strategies and methods for cleanup of chemical and radiological agents;
  - o Computational tools and contamination sensors to enhance water systems' ability to prepare for and respond to environmental disasters; and
  - o Research to inform voluntary standards and guidelines to reduce cyber risks to water infrastructure.
- Homeland Security Research Program will continue to strive to protect human health and the environment by prioritizing the following research activities:
  - o Developing higher-throughput sampling approaches and analytical methods, decontamination technologies, and decision support tools for expedient and effective bio-agent remediation; and
  - o Developing methods to decontaminate water infrastructure to bring water systems back online quickly, including cleanup of household plumbing and management of the associated contaminated water.

**TALKING POINTS:**

- EPA has responsibilities for protection of the Nation's drinking water infrastructure and supply, and for coordinating remediation of nationally-significant environmental incidents.
- EPA's Homeland Security Research Program provides critical science to fulfill these statutory emergency response and bioterrorism responsibilities.
- Our Homeland Security Research Program also supports EPA's efforts to help communities prepare for and respond to disasters.
- For example, the homeland security researchers are advancing wide-area decontamination approaches such as those needed for large-scale incidents like the Fukushima Daiichi Nuclear Power Plant Accident.
- EPA's Homeland Security Research Program works collaboratively with internal and external stakeholders to improve drinking water utilities' ability to respond to contamination, as demonstrated during water emergencies in Charleston, WV, and Corpus Christi, TX.

**RESOURCES (Dollars in Millions):**

Approp.	FY 2017 Enacted		FY 2018 Enacted		FY 2019 Pres Bud		Delta FY 2018 ENA v. FY 2019 Pres Bud	
	\$	FTE	\$	FTE	\$	FTE	\$	FTE
S&T	\$19.0M	49.8	\$18.5M	50.8	\$17.3M	45.5	-\$1.2M	-5.3
SF	\$1.2M	1.7	\$1.2M	1.9	\$1.5M	1.7	+\$0.3M	-0.2
<b>Total*</b>	<b>\$20.2M</b>	<b>51.5</b>	<b>\$19.7M</b>	<b>52.7</b>	<b>\$18.8M</b>	<b>47.2</b>	<b>-\$0.9M</b>	<b>-5.5</b>

\*Totals may not add due to rounding; this accounts for ONLY the EPA Research and Development Program's Homeland Security funds

## ADDITIONAL INFORMATION

### EPA's COMPUTATIONAL TOXICOLOGY RESEARCH

**BACKGROUND:** EPA's Computational Toxicology Research Center develops methods to efficiently screen large numbers of chemicals in a short amount of time, using fewer research dollars than conventional toxicity testing and exposure methods.

#### KEY POINTS:

- EPA's FY 2019 budget request supports the computational toxicology and exposure research (CompTox) program with \$17.2M and 46.3 FTE. This represents a reduction of \$4.2M and 6.1 FTE from FY 2018 Enacted levels.
- In FY 2019, The Program will provide essential support to the Agency in:
  - Fulfilling requirements for chemical prioritization under the revised Toxic Substances Control Act (TSCA).
  - Implementation of the Strategic Plan for Alternative Test Methods and Strategies to Reduce Vertebrate Animal Testing under TSCA.
  - Developing screening-level risk assessments for data-poor chemicals (e.g., per- and polyfluoroalkyl substances, or PFAS).
  - Releasing on-line dashboards to disseminate integrated, publicly available chemical safety data (<https://comptox.epa.gov/dashboard>).
  - Developing decision support tools that help program offices and states with chemical safety decisions (e.g., prioritization).
- One of EPA's main contributions to Tox21 collaboration is ToxCast – a state-of-the-art screening tool for environmental chemicals.

#### TALKING POINTS:

- EPA's CompTox research is making chemical screening faster and cheaper than traditional methods.
- The CompTox research is also developing methods that reduce animal testing.
- EPA's CompTox research supports TSCA by providing critical chemical safety data.

#### RESOURCES (Dollars in Millions):

Approp.	FY 2017 Enacted		FY 2018 Enacted		FY 2019 Pres Bud		Delta FY 2018 ENA v. FY 2019 Pres Bud	
	\$	FTE	\$	FTE	\$	FTE	\$	FTE
S&T	\$21.4M	59.4	\$21.4M	52.4	\$17.2M	46.3	-\$4.2M	-6.1
<b>Total</b>	<b>\$21.4M</b>	<b>59.4</b>	<b>\$21.4M</b>	<b>52.4</b>	<b>\$17.2M</b>	<b>46.3</b>	<b>-\$4.2M</b>	<b>-6.1</b>